

Yuan Dean Scientific CO.,LTD 27D-3W Single SERIES

3Watt Single Output Regulated 1500vdc Isolation Dc-Dc Converter



FEATURES:

- 2:1 Wide Input Voltages Range
- High Efficiency up to 80%
- Regulated Output Types
- Low Ripple And Noise
- Internal SMD Construction
- Operating Temperature: -40°C TO +85°C ● Industry Standard Pinout
- Continuous Short Circuit Protection With Current Foldback.



Specifications typical at TA=25°C, nominal input voltage and rated output current unless otherwise specified

Part Number	Input Voltage Range	Output Voltage Range	Output Current	Efficiency
	Vdc	Vdc	mA	%TYP
27D-12S03R3W	9-18	3.3	909	70
27D-12S05R3W	9-18	5	600	70
27D-12S09R3W	9-18	9	333	75
27D-12S12R3W	9-18	12	250	78
27D-12S15R3W	9-18	15	200	80
27D-24S03R3W	18-36	3.3	700	68
27D-24S05R3W	18-36	5	600	70
27D-24S09R3W	18-36	9	333	75
27D-24S12R3W	18-36	12	250	78
27D-24S15R3W	18-36	15	200	80
27D-48S03R3W	36-72	3.3	700	68
27D-48S05R3W	36-72	5	600	70
27D-48S09R3W	36-72	9	333	75
27D-48S12R3W	36-72	12	250	78
27D-48S15R3W	36-72	15	200	80

Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	Vo, Io Nom			2:1	
Filter	Capacitor				

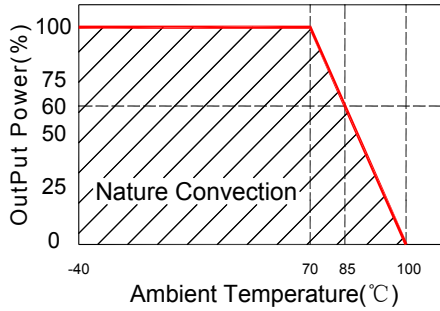
Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	100% full load			±3	%
Short Circuit Protection	Continuous				
Line Regulation	Regulated			±0.5	%
Load Regulation	Regulated			±0.8	%
Ripple & Noise	Output:3.3-9V TYPES BW=DC To 20MHz			100	mVp-p
Ripple & Noise	Output:12-15V TYPES BW=DC To 20MHz			1% of Vout	mVp-p
Transient response setting time	50% load step change		350		us

General Specifications

Parameters	Conditions	Min	Typ	Max	Units
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency	Full load,nominal input		100		KHz
Operating Temperature		-40		85	°C
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material	DAP				
MTBF	MIL-HDBK-217F@25°C	1500000			Hours
Weight			4.5		g
Dimensions			21.8X9.2X11.1		mm

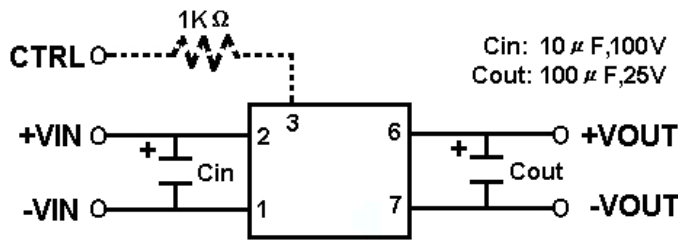
Temperature Derating Graph



Part Number

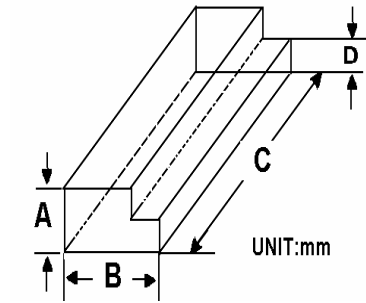
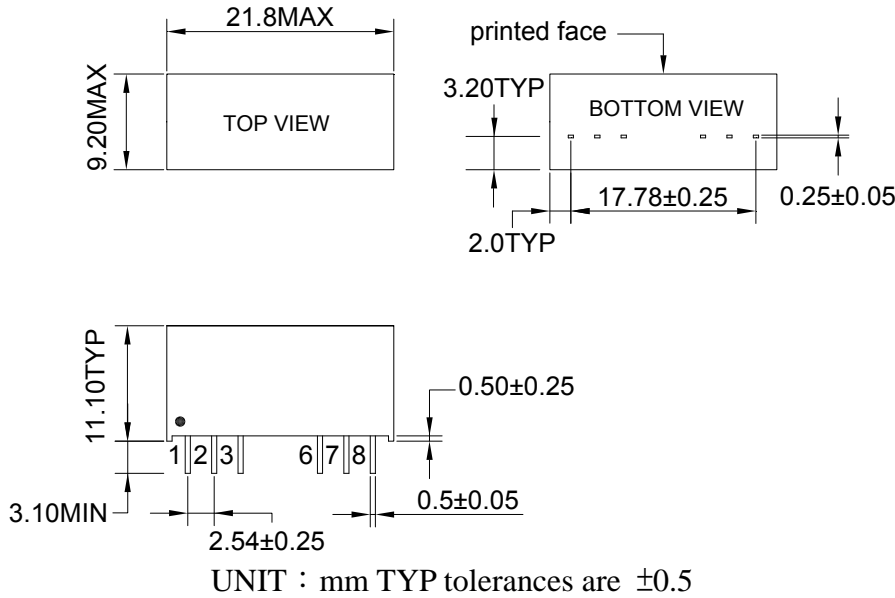
27D - 12 S 05 R 3W
 A B C D E F
 A:Series
 B:Input Voltage
 C:Single Output
 D:Output Voltage
 E:Regulated(R)
 F:Output Power

Recommended Test Circuit



Markings and Dimensions

Packaging



Size(mm)			
A	B	C	D
12.0	28.55	550	6.00

PIN Connection

PIN	1	2	3	6	7	8
Single	-Vin	+Vin	Ctrl-Control input can (can be left open)	+Vout	-Vout	NC